CLAIMS

1. (Currently amended) A method for processing a spread spectrum baseband signal, comprising:

despreading samples of the baseband signal with two or more instances of a spreading code, the instances of the spreading code successively offset relative to the signal samples, to provide two or more despread results; and

interpolating the two or more despread results based on an estimated finger location to provide a symbol estimate, wherein interpolating the two or more despread results includes selecting the despread results around the estimated finger location and selecting interpolation coefficients based on the estimated finger location.

2. (Original) A method as defined in claim 1, wherein the samples of the baseband signal are oversampled at two to four times a chip rate.

3. (Original) A method as defined in claim 2, wherein the step of interpolating the two or more despread results produces an effective sampling of the baseband signal at eight times the chip rate.

4-5. (Cancelled)

6. (Currently amended) A method as defined in claim [[5]]1, wherein the step of interpolating the two or more despread results comprises multiplying the selected despread results by respective selected interpolation coefficients to provide intermediate values and summing the intermediate values to provide the symbol estimate.

7. (Original) A method as defined in claim 1, wherein the step of interpolating the two or more despread results is repeated at a symbol rate.

8. (Original) A method as defined in claim 1, wherein despreading samples of the baseband signal comprises multiplying the samples by respective code elements to provide intermediate values and accumulating the intermediate values to provide a despread result.

9. (Original) A method as defined in claim 1, wherein successive instances of the spreading code are offset by one half chip relative to the signal samples.

10. (Original) A method as defined in claim 1, wherein the steps of despreading samples of the baseband signal and interpolating the two or more despread results are performed by a programmable digital signal processor.

11. (Original) A method as defined in claim 10, wherein the step of despreading samples of the baseband signal comprises performing a plurality of despreading operations simultaneously.

12. (Original) A method as defined in claim 1, wherein interpolating the two or more despread results comprises:

interpolating the two or more despread results using interpolation coefficients corresponding to the estimated finger location,

interpolating the two or more despread results using interpolation coefficients corresponding to a time earlier than the estimated finger location, and

interpolating the two or more despread results using interpolation coefficients corresponding to a time later than the estimated finger location.

13. (Currently amended) Apparatus for processing a spread spectrum baseband signal, comprising:

means for despreading samples of the baseband signal with two or more instances of a spreading code, the instances of the spreading code successively offset relative to the signal samples, to provide two or more despread results; and

means for interpolating the two or more despread results based on an estimated finger location to provide a symbol estimate, wherein the means for interpolating the two or more despread results includes means for selecting the despread results around the estimated finger location and means for selecting interpolation coefficients based on the estimated finger location.

14. (Original) Apparatus as defined in claim 13, wherein the samples of the baseband signal are oversampled at two to four times a chip rate.

15. (Original) Apparatus as defined in claim 14, wherein the means for interpolating the two or more despread results performs an effective sampling of the baseband signal at eight times the chip rate.

16-17. (Cancelled)

18. (Currently amended) Apparatus as defined in claim [[17]]13, wherein the means for interpolating the two or more despread results comprises means for multiplying the selected despread results by respective selected interpolation coefficients to provide intermediate values and means for summing the intermediate values to provide the symbol estimate.

19. (Original) Apparatus as defined in claim 13, wherein the means for interpolating the two or more despread results operates at a symbol rate.

20. (Original) Apparatus as defined in claim 13, wherein the means for despreading samples of the baseband signal comprises means for multiplying the samples by respective code elements to provide intermediate values and means for accumulating the intermediate values to provide a despread result.

21. (Original) Apparatus as defined in claim 13, wherein successive instances of the spreading code are offset by one half chip relative to the signal samples.

22. (Original) Apparatus as defined in claim 13, wherein the means for despreading and the means for interpolating are implemented by a programmable digital signal processor.

23. (Original) Apparatus as defined in claim 22, wherein the means for despreading samples of the baseband signal comprises means for performing a plurality of despreading operations simultaneously.

24. (Currently amended) Apparatus for processing a spread spectrum baseband signal, comprising:

a digital signal processor including a memory for holding instructions and data, program sequencer for controlling execution of an instruction sequence and at least one computation block for executing the instruction sequence, said computation block including means for despreading samples of the baseband signal with two or more instances of a spreading code, the instances of the spreading code successively offset relative to the signal samples, to provide two or more despread results, and means for interpolating the two or more despread results based on an estimated finger location to provide a symbol estimate, wherein the means for interpolating the two or more despread results includes means for selecting the despread results around the estimated finger location and means for selecting interpolation coefficients based on the estimated finger location.